## ESA presidents comment on NEON de-scoping | EcoTone: news and views on ecological science

www.esa.org /esablog/guest-posts/esa-presidents-comment-on-neon-de-scoping/

Liza Lester

A guest commentary from 16 current and past presidents of ESA addressing a recent move by the National Science Foundation to shrink the mission scope of the National Ecological Observatory Network (NEON).



## Dear Colleague,

During the recent ESA Centennial Meeting in mid-August, ESA Past-presidents gathered in Baltimore to discuss NEON's (National Ecological Observatory Network) future. Here are some thoughts we'd like to share with you.

The ecological community strongly supports the goals and mission of NEON, despite the recent descoping, and looks forward to working with NEON to achieve its potential. A recent article in *Science* by Jeffrey Mervis highlights many of the problems that have plagued a program of unprecedented size and scale for the ecological community.

Nevertheless, we remain excited about the potential new science that could emerge from successful NEON. Years in the planning stage, NEON was conceived to generate consistent empirical data across broad scales of time and space that could reveal regional- and continental-scale contexts and forcing factors driving ecological change. The 30-year lifespan of NEON will benefit a generation of ecologists and generate new hypotheses while accurately documenting environmental change.

Other national and highly successful major-infrastructure projects such as the Hubbell telescope also encountered major problems during deployment. Poor initial performance was solved and the telescope was improved in part through extensive engagement of the astronomy community. Analogously, it is essential to foster transparent communication among the scientific community, National Science Foundation (NSF), and NEON to ensure that the re-scoped NEON best meets the needs of environmental and ecological science in the U.S.

While any project of this scale faces construction, budget, and scheduling challenges, the recent decision by NSF and NEON for a significant reduction in infrastructure shocked many in the research community. We must now confront these challenges in a collaborative and transparent way that can renew much of NEON's mission despite scaling back relocatable sites, some core site capabilities, and eliminating the aquatic experiment.

The de-scoping decisions were made with some input from the scientific community, NEON's Science, Technology and Education Advisory Committee, and representatives of the NEON Board of Directors. While this is a good start toward better communication, much stronger engagement with the scientific community would be achieved by establishing a consortium for environmental biology similar to those of other scientific communities (e.g. astronomers, climate scientists, oceanographers, and seismologists) to coordinate the mission, use and products of large national infrastructures.

We believe successful NEON could generate valuable data to help address problems that currently challenge the very fabric of society and the biosphere that sustains it. NEON can compliment, but not replace, other forms of ecological research, and we are encouraged by NSF's commitment to support STREON, the aquatic experiment, as an investigator-led activity. We encourage NSF and NEON to reengage with the ecological community to assure that NEON will yield the scientific results it was designed to address.

Jill S. Baron, ESA President 2013

Monica G. Turner, ESA President 2015

David Inouye, ESA President 2014

Jill S. Baron, ESA President 2013

Scott Collins, ESA President 2012

F. Terry Chapin, ESA President 2010

Mary Power, ESA President 2009

Alison Power, ESA President 2008

Norm Christensen, ESA President 2007

Alan Covich, ESA President 2006

Nancy Grimm, ESA President 2005

Ann Bartuska, ESA President 2002

Diana H. Wall, ESA President 1999

Jerry H. Franklin, ESA President 1993

H. Ron Pulliam, ESA President 1991

Jean Langenheim, ESA President 1986